**Instructions on How to Read the ACS Summary File into Excel**

This tool is another way data users can read the Summary File into Excel, and it is designed to be compatible with any version of the software. While this example uses the 2007-2009 ACS 3-year Summary File, the file layout is similar for the most recent ACS Summary File. To begin using this tool, users must first download the Summary File data, the Excel template file, and the Excel geography file.

The 2007-2009 ACS 3-year Summary File is available at http://www2.census.gov/acs2009_3yr/summaryfile/. In this example, we are accessing the data by selecting "2007-2009 ACSSF By State All Tables," then selecting "California All Geographies.zip." Once downloaded and unzipped to a local directory, this compressed file contains individual text files and one geography file per Summary File sequence. We are using Sequence file 1, so you need to open and save the corresponding estimate and margin of error text files (e20093ca0001000.txt and m20093ca0001000.txt).

Next, you need to download the Excel template file, SummaryFileXLS.zip, from http://www2.census.gov/acs2009_3yr/summaryfile/UserTools/. (Note: SummaryFileXLS.zip is named SummaryFileTemplates.zip starting with the 2011 release.) Once unzipped to a local directory, this compressed file contains an Excel file for each Summary File sequence. Again, we are using Sequence File 1, so you need to open Seq1.xls.

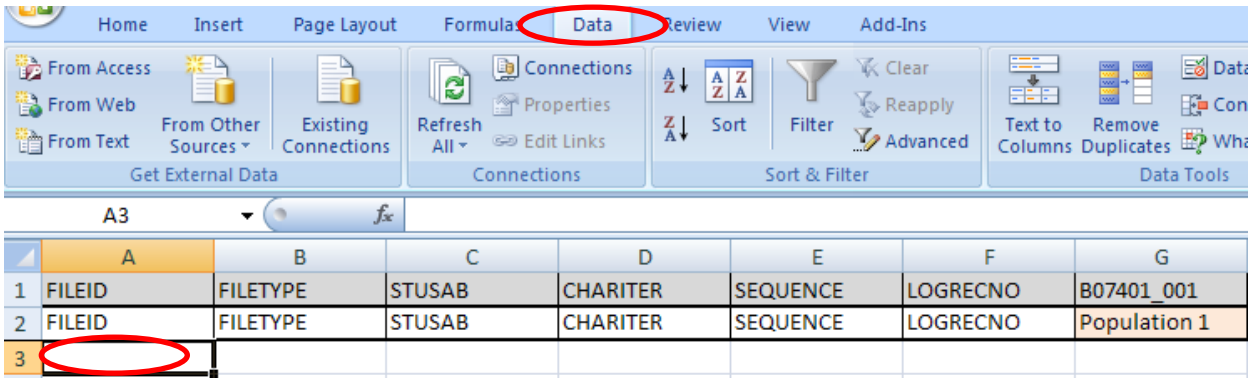
Finally, you need to download and save the Excel geography file, mini_geofile.xls, from http://www2.census.gov/acs2009_3yr/summaryfile/UserTools/Geography/ to the same local directory. Each worksheet in the mini_geofile.xls represents geographies that are within a state. Note that the "US" worksheet only contains summary levels that can cross state boundaries. "US" is not the data at the national summary level.

We will walk through an example using sequence 1 for the state of California:

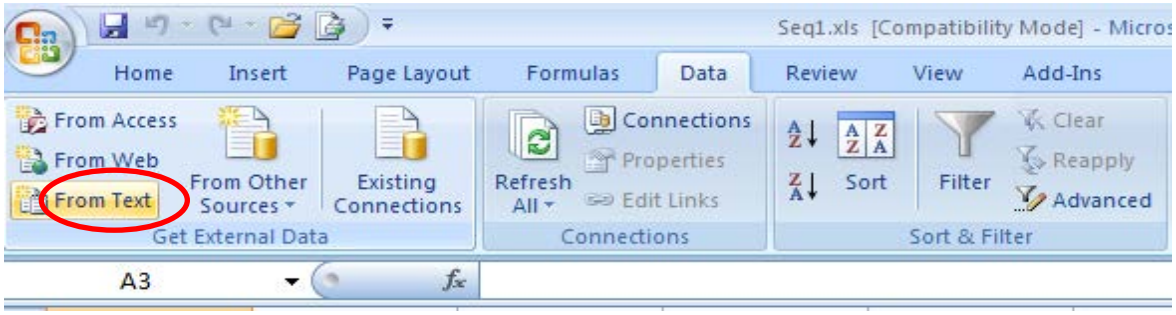
1) When the template file is open in Excel it should appear as below:

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | B07401_001 | B07401_002 |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | Population 1 | Population 1 |
| 3 | | | | | | | | |
| 4 | | | | | | | | |

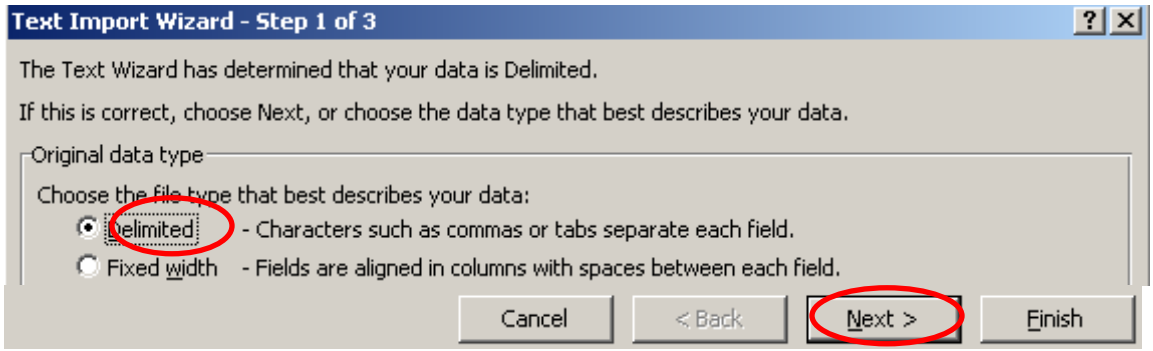
2) Place your cursor in cell **A3** and click on the **Data** tab in the Excel tool bar. See below:


Home
Insert
Page Layout
Formulas
Data
Review
View
Add-Ins
From Access
From Web
From Text
From Other Sources
Existing Connections
Get External Data
Refresh All
Connections
Properties
Edit Links
Connections
Sort
Filter
Clear
Reapply
Advanced
Sort & Filter
Text to Columns
Remove Duplicates
Data Tools
A3
A B C D E F G
1 FILEID FILETYPE STUSAB CHARITER SEQUENCE LOGRECNO B07401_001
2 FILEID FILETYPE STUSAB CHARITER SEQUENCE LOGRECNO Population 1
3

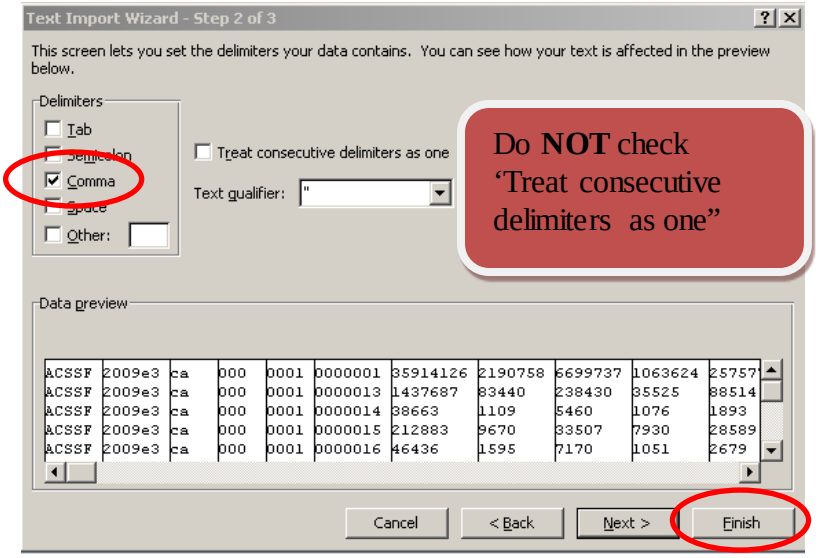
3) To import the Summary File text file into Excel click on **From Text** in the **Get External Data** section of the tool bar. In this example, we are opening the estimate file for California (e20093ca0001000.txt).



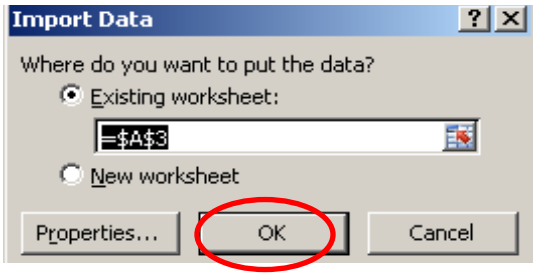

4) Step 1 of the Text Import Wizard will appear. Under **Original data type** choose **Delimited**, and then click **Next**.




5) Step 2 of the Excel Text Import Wizard will appear. Under **Delimiters** choose **Comma**. Users may click **Finish** to import the file or choose **Next** to format the Excel columns.



6) A Pop up window will appear to confirm cell **A3** as the correct cell. Click **OK**.




7) The summary file will be imported in Excel as below:

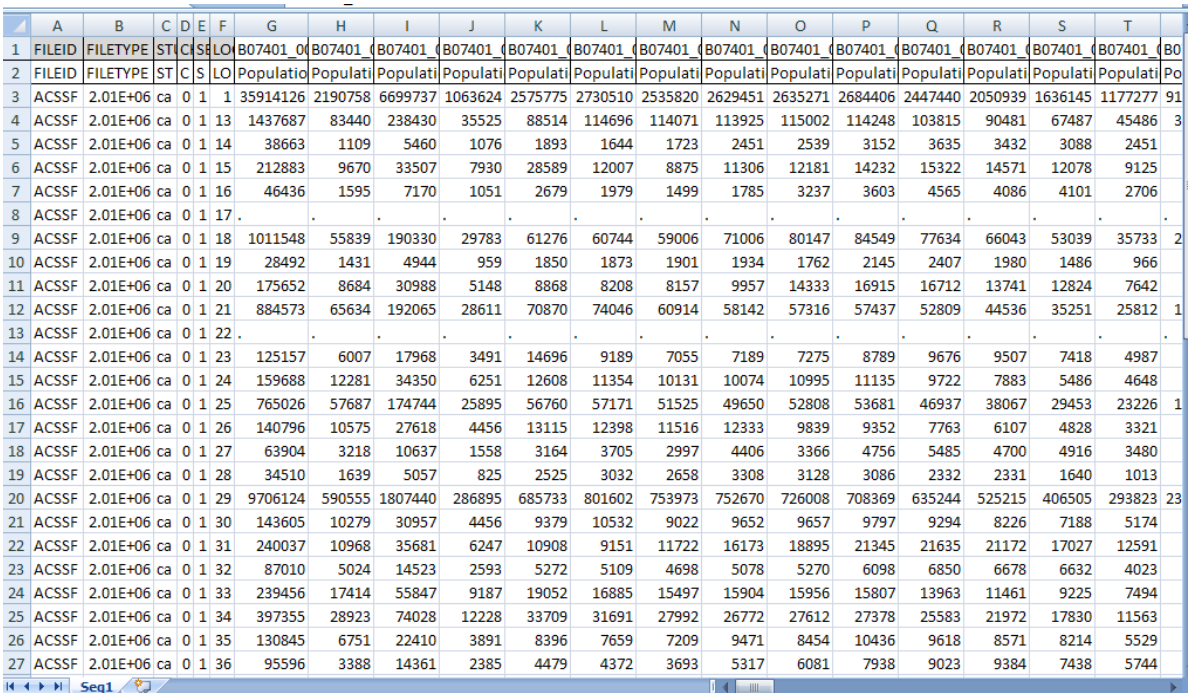
| | G | H | I | J | K | L |
|---|---|---|---|---|---|---|
| 1 | B07401_001 | B07401_002 | B07401_003 | B07401_004 | B07401_005 | B07401_006 |
| 2 | Population 1 year and over in the United States | Population 1 year and over in the United States% 1 to 4 years | Population 1 year and over in the United States% 5 to 17 years | Population 1 year and over in the United States% 18 and 19 years | Population 1 year and over in the United States% 20 to 24 years | Population 1 year and over in the United States% 25 to 29 years |
| 3 | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 |

*Row 1* – Contains a unique identifier of Table ID and Line Number with a "_" between them
*Row 2* – Contains the associated metadata for each unique Identifier
*Row 3* – Is the first Row of the imported data

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO |
| 3 | ACSSF | 20093 | ca | 0 | 1 | 1 |

*Column A* – Is a constant value of "ACSSF" (stands for ACS Summary File)
*Column B* – Contains the associated metadata for each unique Identifier
*Column C* – Is the first Row of the imported data

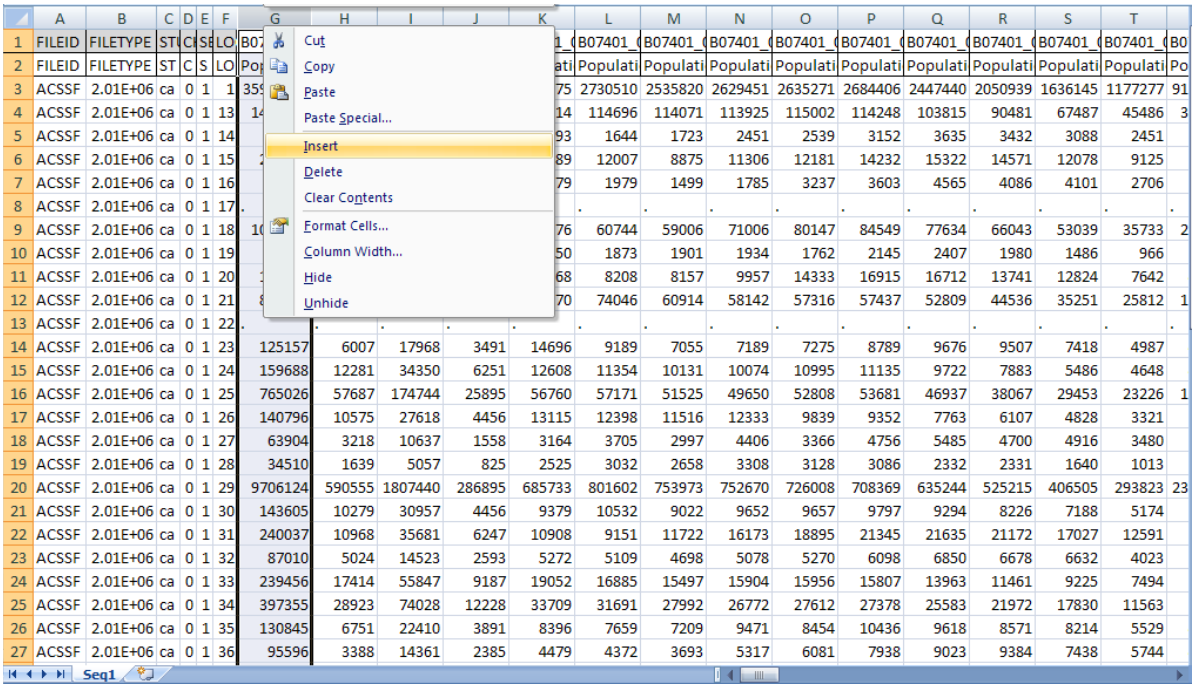
8) Read in the estimates and margins of error for each sequence needed. For example, here is the screenshot of the estimates for sequence 1 (the screenshots are for illustration purposes only and may not reflect the current data):



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | ST | C | S | LO | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B0 |
| 2 | FILEID | FILETYPE | ST | C | S | LO | Populatio | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Po |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 | 2635271 | 2684406 | 2447440 | 2050939 | 1636145 | 1177277 | 91 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114071 | 113925 | 115002 | 114248 | 103815 | 90481 | 67487 | 45486 | 3 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1723 | 2451 | 2539 | 3152 | 3635 | 3432 | 3088 | 2451 | |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8875 | 11306 | 12181 | 14232 | 15322 | 14571 | 12078 | 9125 | |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1499 | 1785 | 3237 | 3603 | 4565 | 4086 | 4101 | 2706 | |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59006 | 71006 | 80147 | 84549 | 77634 | 66043 | 53039 | 35733 | 2 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1901 | 1934 | 1762 | 2145 | 2407 | 1980 | 1486 | 966 | |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8157 | 9957 | 14333 | 16915 | 16712 | 13741 | 12824 | 7642 | |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60914 | 58142 | 57316 | 57437 | 52809 | 44536 | 35251 | 25812 | 1 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 | 7275 | 8789 | 9676 | 9507 | 7418 | 4987 | |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 | 10995 | 11135 | 9722 | 7883 | 5486 | 4648 | |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 | 52808 | 53681 | 46937 | 38067 | 29453 | 23226 | 1 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 | 9839 | 9352 | 7763 | 6107 | 4828 | 3321 | |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 | 3366 | 4756 | 5485 | 4700 | 4916 | 3480 | |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 | 3128 | 3086 | 2332 | 2331 | 1640 | 1013 | |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 | 726008 | 708369 | 635244 | 525215 | 406505 | 293823 | 23 |
| 21 | ACSSF | 2.01E+06 | ca | 0 | 1 | 30 | 143605 | 10279 | 30957 | 4456 | 9379 | 10532 | 9022 | 9652 | 9657 | 9797 | 9294 | 8226 | 7188 | 5174 | |
| 22 | ACSSF | 2.01E+06 | ca | 0 | 1 | 31 | 240037 | 10968 | 35681 | 6247 | 10908 | 9151 | 11722 | 16173 | 18895 | 21345 | 21635 | 21172 | 17027 | 12591 | |
| 23 | ACSSF | 2.01E+06 | ca | 0 | 1 | 32 | 87010 | 5024 | 14523 | 2593 | 5272 | 5109 | 4698 | 5078 | 5270 | 6098 | 6850 | 6678 | 6632 | 4023 | |
| 24 | ACSSF | 2.01E+06 | ca | 0 | 1 | 33 | 239456 | 17414 | 55847 | 9187 | 19052 | 16885 | 15497 | 15904 | 15956 | 15807 | 13963 | 11461 | 9225 | 7494 | |
| 25 | ACSSF | 2.01E+06 | ca | 0 | 1 | 34 | 397355 | 28923 | 74028 | 12228 | 33709 | 31691 | 27992 | 26772 | 27612 | 27378 | 25583 | 21972 | 17830 | 11563 | |
| 26 | ACSSF | 2.01E+06 | ca | 0 | 1 | 35 | 130845 | 6751 | 22410 | 3891 | 8396 | 7659 | 7209 | 9471 | 8454 | 10436 | 9618 | 8571 | 8214 | 5529 | |
| 27 | ACSSF | 2.01E+06 | ca | 0 | 1 | 36 | 95596 | 3388 | 14361 | 2385 | 4479 | 4372 | 3693 | 5317 | 6081 | 7938 | 9023 | 9384 | 7438 | 5744 | |

Seq1

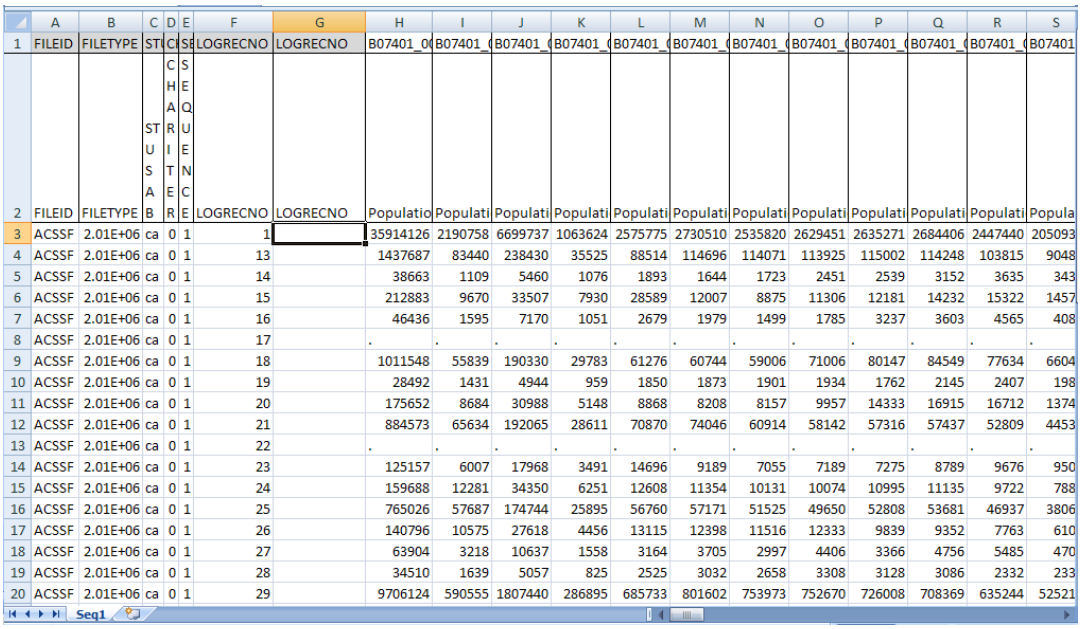
9) Next, you need to pad zeroes for the logical record number LOGRECNO.Add a column next to LOGRECNO. To do this, **Highlight** column G, then **Right Click** and click **Insert**.




| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | ST | C | S | LO | B07 | | | | | 1 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B0 |
| 2 | FILEID | FILETYPE | ST | C | S | LO | Po | | | | | ati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Po |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 35 | | | | | 75 | 2730510 | 2535820 | 2629451 | 2635271 | 2684406 | 2447440 | 2050939 | 1636145 | 1177277 | 91 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 14 | | | | | 14 | 114696 | 114071 | 113925 | 115002 | 114248 | 103815 | 90481 | 67487 | 45486 | 3 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | | | | | | 93 | 1644 | 1723 | 2451 | 2539 | 3152 | 3635 | 3432 | 3088 | 2451 | |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 2 | | | | | 89 | 12007 | 8875 | 11306 | 12181 | 14232 | 15322 | 14571 | 12078 | 9125 | |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | | | | | | 79 | 1979 | 1499 | 1785 | 3237 | 3603 | 4565 | 4086 | 4101 | 2706 | |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | . | | | | | . | . | . | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 10 | | | | | 76 | 60744 | 59006 | 71006 | 80147 | 84549 | 77634 | 66043 | 53039 | 35733 | 2 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | | | | | | 50 | 1873 | 1901 | 1934 | 1762 | 2145 | 2407 | 1980 | 1486 | 966 | |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 1 | | | | | 68 | 8208 | 8157 | 9957 | 14333 | 16915 | 16712 | 13741 | 12824 | 7642 | |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 8 | | | | | 70 | 74046 | 60914 | 58142 | 57316 | 57437 | 52809 | 44536 | 35251 | 25812 | 1 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 | 7275 | 8789 | 9676 | 9507 | 7418 | 4987 | | |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 | 10995 | 11135 | 9722 | 7883 | 5486 | 4648 | | |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 | 52808 | 53681 | 46937 | 38067 | 29453 | 23226 | 1 | |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 | 9839 | 9352 | 7763 | 6107 | 4828 | 3321 | | |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 | 3366 | 4756 | 5485 | 4700 | 4916 | 3480 | | |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 | 3128 | 3086 | 2332 | 2331 | 1640 | 1013 | | |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 | 726008 | 708369 | 635244 | 525215 | 406505 | 293823 | 23 | |
| 21 | ACSSF | 2.01E+06 | ca | 0 | 1 | 30 | 143605 | 10279 | 30957 | 4456 | 9379 | 10532 | 9022 | 9652 | 9657 | 9797 | 9294 | 8226 | 7188 | 5174 | | |
| 22 | ACSSF | 2.01E+06 | ca | 0 | 1 | 31 | 240037 | 10968 | 35681 | 6247 | 10908 | 9151 | 11722 | 16173 | 18895 | 21345 | 21635 | 21172 | 17027 | 12591 | | |
| 23 | ACSSF | 2.01E+06 | ca | 0 | 1 | 32 | 87010 | 5024 | 14523 | 2593 | 5272 | 5109 | 4698 | 5078 | 5270 | 6098 | 6850 | 6678 | 6632 | 4023 | | |
| 24 | ACSSF | 2.01E+06 | ca | 0 | 1 | 33 | 239456 | 17414 | 55847 | 9187 | 19052 | 16885 | 15497 | 15904 | 15956 | 15807 | 13963 | 11461 | 9225 | 7494 | | |
| 25 | ACSSF | 2.01E+06 | ca | 0 | 1 | 34 | 397355 | 28923 | 74028 | 12228 | 33709 | 31691 | 27992 | 26772 | 27612 | 27378 | 25583 | 21972 | 17830 | 11563 | | |
| 26 | ACSSF | 2.01E+06 | ca | 0 | 1 | 35 | 130845 | 6751 | 22410 | 3891 | 8396 | 7659 | 7209 | 9471 | 8454 | 10436 | 9618 | 8571 | 8214 | 5529 | | |
| 27 | ACSSF | 2.01E+06 | ca | 0 | 1 | 36 | 95596 | 3388 | 14361 | 2385 | 4479 | 4372 | 3693 | 5317 | 6081 | 7938 | 9023 | 9384 | 7438 | 5744 | | |

Seq1

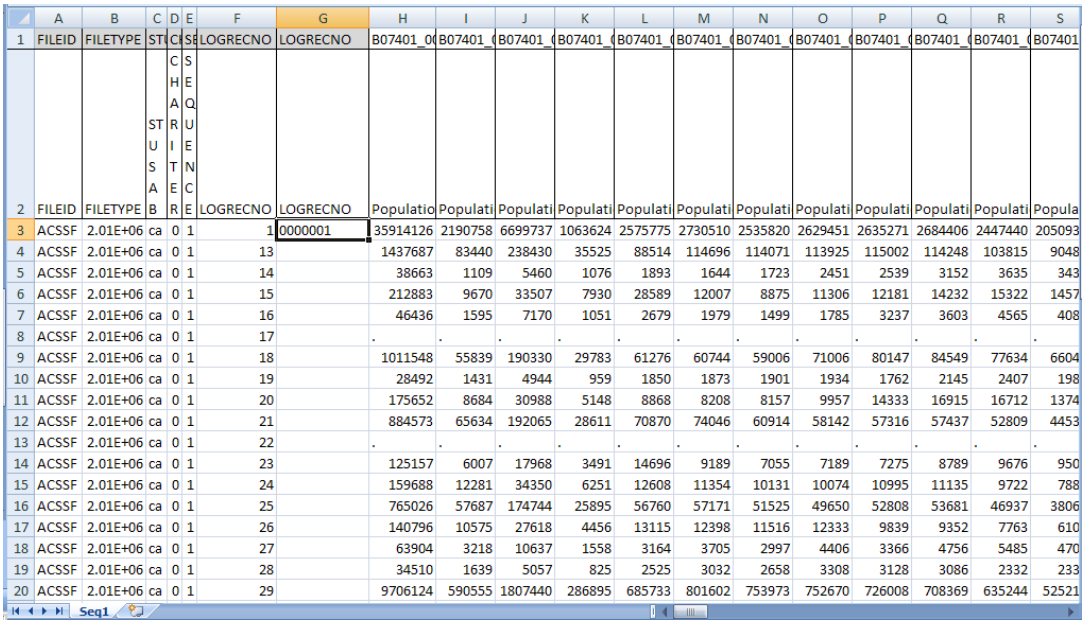
a. For cells G1 and G2, put in **LOGRECNO** as the label.



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STU | CH | SE | LOGRECNO | LOGRECNO | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401 |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | Populatio | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Popula |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 | 2635271 | 2684406 | 2447440 | 205093 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114071 | 113925 | 115002 | 114248 | 103815 | 9048 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1723 | 2451 | 2539 | 3152 | 3635 | 343 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8875 | 11306 | 12181 | 14232 | 15322 | 1457 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1499 | 1785 | 3237 | 3603 | 4565 | 408 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | | . | . | . | . | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59006 | 71006 | 80147 | 84549 | 77634 | 6604 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1901 | 1934 | 1762 | 2145 | 2407 | 198 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8157 | 9957 | 14333 | 16915 | 16712 | 1374 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60914 | 58142 | 57316 | 57437 | 52809 | 4453 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | | . | . | . | . | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 | 7275 | 8789 | 9676 | 950 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 | 10995 | 11135 | 9722 | 788 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 | 52808 | 53681 | 46937 | 3806 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 | 9839 | 9352 | 7763 | 610 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 | 3366 | 4756 | 5485 | 470 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 | 3128 | 3086 | 2332 | 233 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 | 726008 | 708369 | 635244 | 52521 |

Seq1

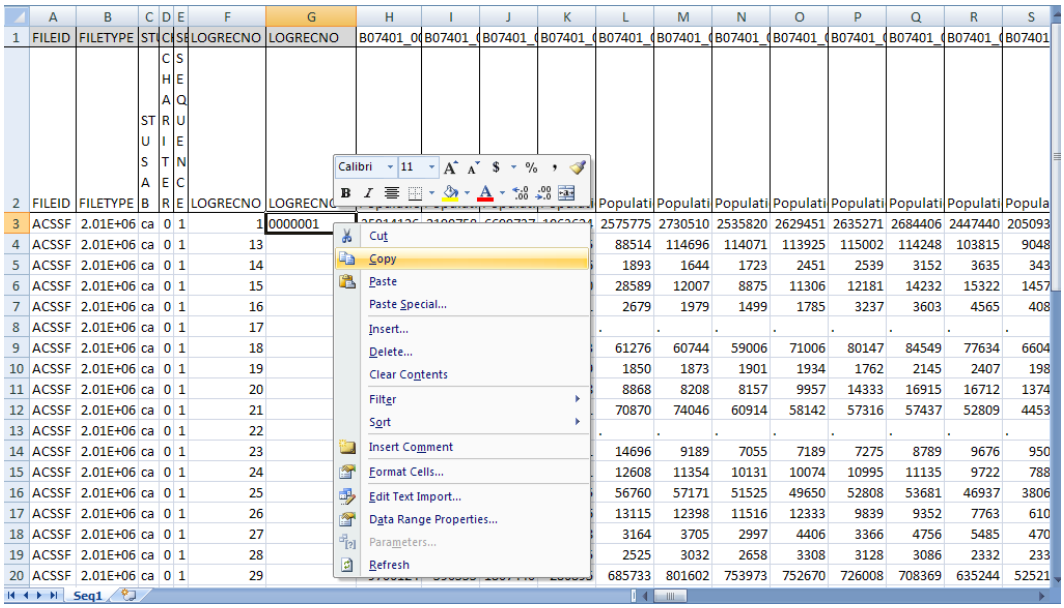
b. **Highlight** cell G3 and enter the formula **=REPT("0",7-LEN(F3))&F3**, then hit **Enter**.



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STU | CH | SE | LOGRECNO | LOGRECNO | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401 | B07401_ | B07401_ | B07401_ | B07401 | B07401 |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | Populatio | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Popula |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 0000001 | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 | 2635271 | 2684406 | 2447440 | 205093 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114071 | 113925 | 115002 | 114248 | 103815 | 9048 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1723 | 2451 | 2539 | 3152 | 3635 | 343 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8875 | 11306 | 12181 | 14232 | 15322 | 1457 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1499 | 1785 | 3237 | 3603 | 4565 | 408 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | | . | . | . | . | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59006 | 71006 | 80147 | 84549 | 77634 | 6604 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1901 | 1934 | 1762 | 2145 | 2407 | 198 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8157 | 9957 | 14333 | 16915 | 16712 | 1374 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60914 | 58142 | 57316 | 57437 | 52809 | 4453 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | | . | . | . | . | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 | 7275 | 8789 | 9676 | 950 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 | 10995 | 11135 | 9722 | 788 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 | 52808 | 53681 | 46937 | 3806 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 | 9839 | 9352 | 7763 | 610 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 | 3366 | 4756 | 5485 | 470 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 | 3128 | 3086 | 2332 | 233 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 | 726008 | 708369 | 635244 | 52521 |

Seq1

c. Copy and paste the formula in cell G3 down column G to the last row of the data.

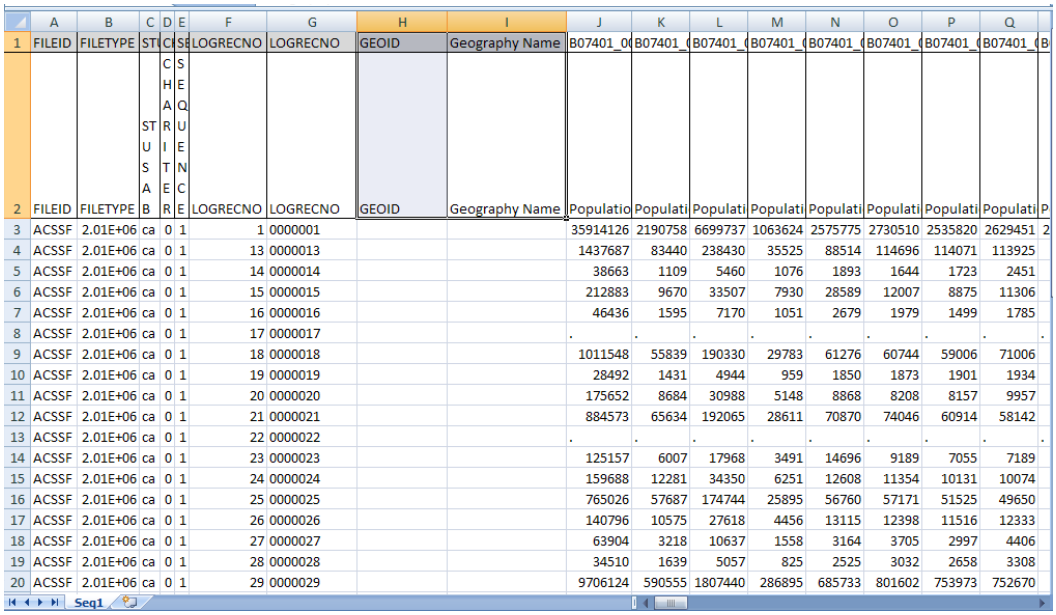



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | B07401_0 | B07401_( | B07401_( | B07401_( | B07401_( | B07401_( | B07401_( | B07401_( | B07401_( | B07401_( | B07401_( | B07401 |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | Populatio | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Populati | Popula |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 0000001 | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 | 2635271 | 2684406 | 2447440 | 205093 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 0000013 | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114071 | 113925 | 115002 | 114248 | 103815 | 9048 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | 0000014 | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1723 | 2451 | 2539 | 3152 | 3635 | 343 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 0000015 | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8875 | 11306 | 12181 | 14232 | 15322 | 1457 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | 0000016 | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1499 | 1785 | 3237 | 3603 | 4565 | 408 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | 0000017 | . | . | . | . | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 0000018 | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59006 | 71006 | 80147 | 84549 | 77634 | 6604 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | 0000019 | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1901 | 1934 | 1762 | 2145 | 2407 | 198 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 0000020 | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8157 | 9957 | 14333 | 16915 | 16712 | 1374 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 0000021 | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60914 | 58142 | 57316 | 57437 | 52809 | 4453 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | 0000022 | . | . | . | . | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 0000023 | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 | 7275 | 8789 | 9676 | 950 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 0000024 | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 | 10995 | 11135 | 9722 | 788 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 0000025 | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 | 52808 | 53681 | 46937 | 3806 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 0000026 | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 | 9839 | 9352 | 7763 | 610 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 0000027 | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 | 3366 | 4756 | 5485 | 470 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 0000028 | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 | 3128 | 3086 | 2332 | 233 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 0000029 | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 | 726008 | 708369 | 635244 | 52521 |

Seq1

10) Add geographies by using common merged keys.

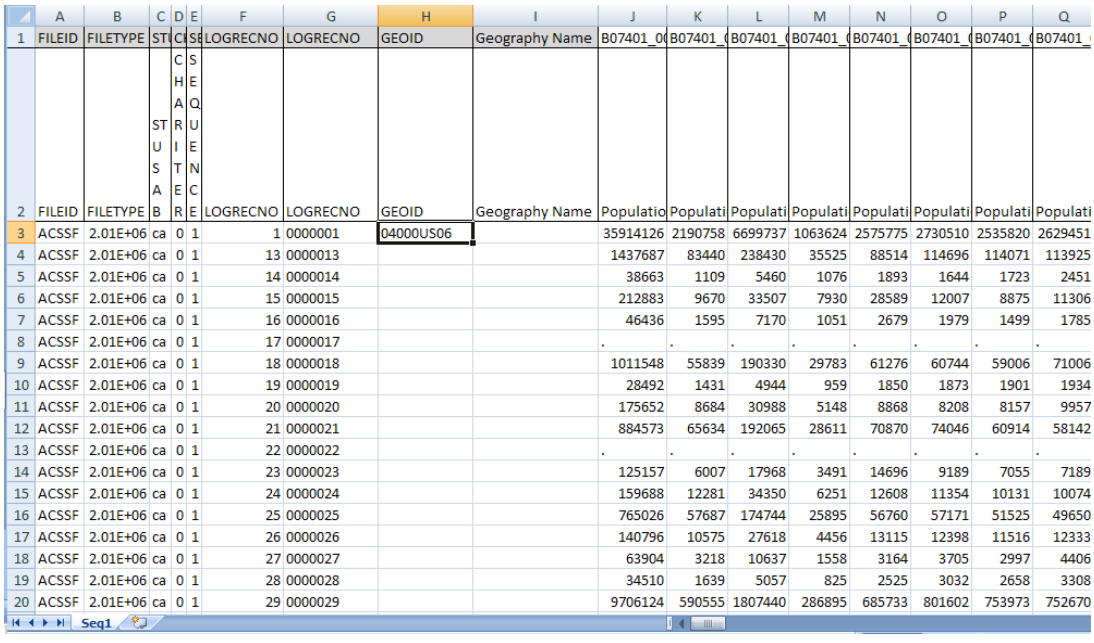
a. To add geographies, insert two extra columns next to the padded LOGRECNO column G, and label them GEOID and Geography Name. Open the **Excel geography file** mini_geofile.xls and keep both Seq1.xls and mini_geofile.xls files open.



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STU | CH | SE | LOGRECNO | LOGRECNO | GEOID | Geography Name | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | GEOID | Geography Name | Populatio | Populati | Populati | Populati | Populati | Populati | Populati | Populati |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 0000001 | | | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 0000013 | | | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114071 | 113925 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | 0000014 | | | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1723 | 2451 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 0000015 | | | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8875 | 11306 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | 0000016 | | | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1499 | 1785 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | 0000017 | | | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 0000018 | | | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59006 | 71006 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | 0000019 | | | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1901 | 1934 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 0000020 | | | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8157 | 9957 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 0000021 | | | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60914 | 58142 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | 0000022 | | | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 0000023 | | | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 0000024 | | | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 0000025 | | | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 0000026 | | | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 0000027 | | | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 0000028 | | | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 0000029 | | | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 |

Seq1

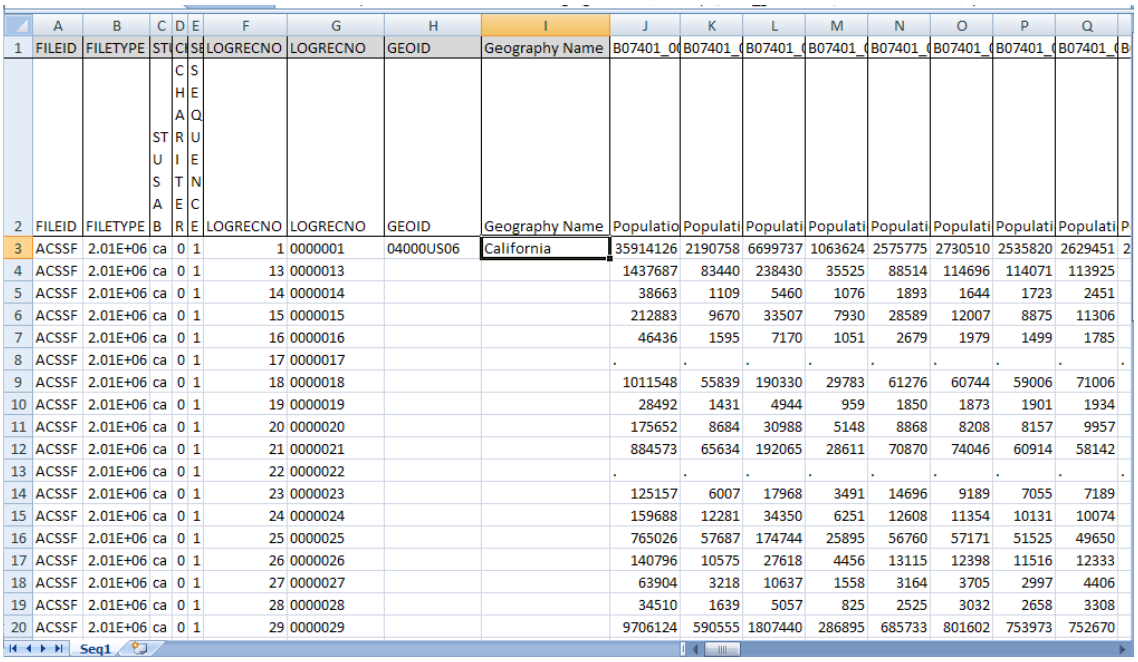
b. Add GEOID by using LOGRECNO as the common merged key from both Seq1.xls and ca.xls. **Highlight** cell H3 and enter the formula: **=VLOOKUP(G3,[mini_geofile.xls]ca!B:C,2,0)**



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STU | CH | SE | LOGRECNO | LOGRECNO | GEOID | Geography Name | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | GEOID | Geography Name | Populatio | Populati | Populati | Populati | Populati | Populati | Populati | Populati |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 0000001 | 04000US06 | | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 0000013 | | | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114071 | 113925 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | 0000014 | | | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1723 | 2451 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 0000015 | | | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8875 | 11306 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | 0000016 | | | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1499 | 1785 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | 0000017 | | | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 0000018 | | | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59006 | 71006 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | 0000019 | | | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1901 | 1934 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 0000020 | | | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8157 | 9957 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 0000021 | | | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60914 | 58142 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | 0000022 | | | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 0000023 | | | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 0000024 | | | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 0000025 | | | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 0000026 | | | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 0000027 | | | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 0000028 | | | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 0000029 | | | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 |

Seq1

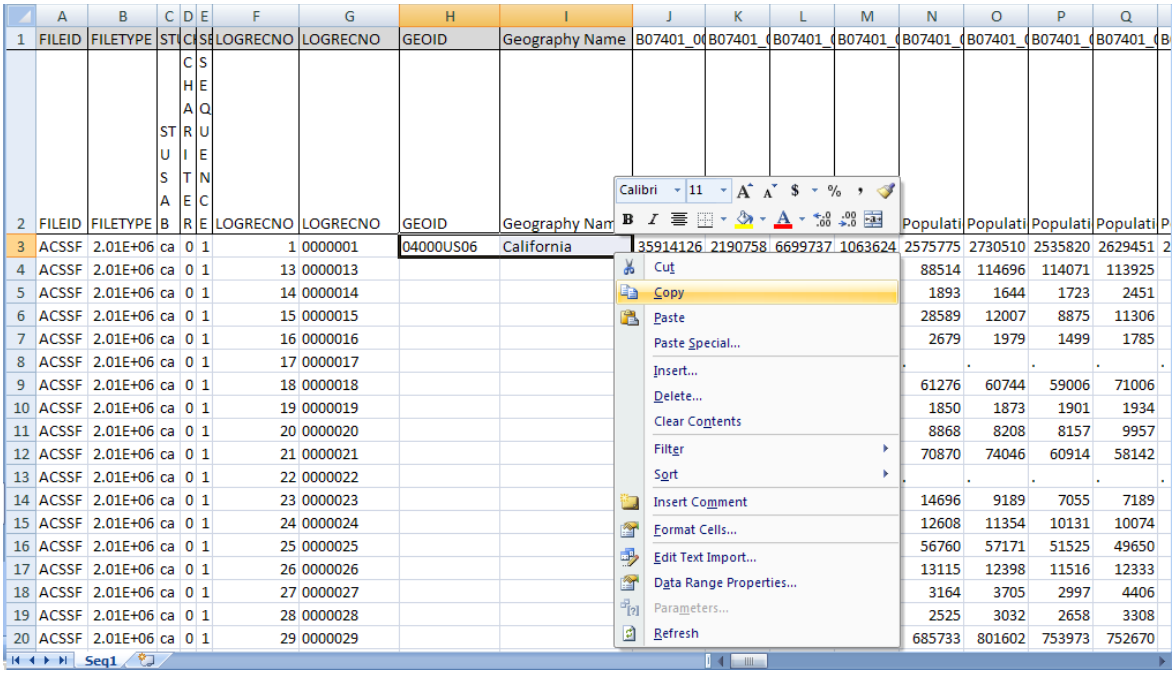
c. Add geography names by using GEOID as the common merged key from both Seq1.xls and ca.xls. **Highlight** cell I3 and enter the formula: **=VLOOKUP(H3,[mini_geofile.xls]ca!C:D,2,0)**



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STU | CH | SE | LOGRECNO | LOGRECNO | GEOID | Geography Name | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | GEOID | Geography Name | Populatio | Populati | Populati | Populati | Populati | Populati | Populati | Populati |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 0000001 | 04000US06 | California | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 0000013 | | | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114071 | 113925 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | 0000014 | | | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1723 | 2451 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 0000015 | | | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8875 | 11306 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | 0000016 | | | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1499 | 1785 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | 0000017 | | | . | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 0000018 | | | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59006 | 71006 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | 0000019 | | | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1901 | 1934 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 0000020 | | | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8157 | 9957 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 0000021 | | | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60914 | 58142 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | 0000022 | | | . | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 0000023 | | | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 7055 | 7189 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 0000024 | | | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10131 | 10074 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 0000025 | | | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51525 | 49650 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 0000026 | | | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11516 | 12333 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 0000027 | | | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2997 | 4406 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 0000028 | | | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2658 | 3308 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 0000029 | | | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753973 | 752670 |

Seq1

d. **Highlight** both cells H3 and I3 and **right click** to copy the formulas.



| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | STU | CH | SE | LOGRECNO | LOGRECNO | GEOID | Geography Nam | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | GEOID | Geography Nam | | | | | Populati | Populati | Populati | Populati |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 0000001 | 04000US06 | California | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535820 | 2629451 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 0000013 | | | | | | | 88514 | 114696 | 114071 | 113925 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | 0000014 | | | | | | | 1893 | 1644 | 1723 | 2451 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 0000015 | | | | | | | 28589 | 12007 | 8875 | 11306 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | 0000016 | | | | | | | 2679 | 1979 | 1499 | 1785 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | 0000017 | | | | | | | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 0000018 | | | | | | | 61276 | 60744 | 59006 | 71006 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | 0000019 | | | | | | | 1850 | 1873 | 1901 | 1934 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 0000020 | | | | | | | 8868 | 8208 | 8157 | 9957 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 0000021 | | | | | | | 70870 | 74046 | 60914 | 58142 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | 0000022 | | | | | | | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 0000023 | | | | | | | 14696 | 9189 | 7055 | 7189 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 0000024 | | | | | | | 12608 | 11354 | 10131 | 10074 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 0000025 | | | | | | | 56760 | 57171 | 51525 | 49650 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 0000026 | | | | | | | 13115 | 12398 | 11516 | 12333 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 0000027 | | | | | | | 3164 | 3705 | 2997 | 4406 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 0000028 | | | | | | | 2525 | 3032 | 2658 | 3308 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 0000029 | | | | | | | 685733 | 801602 | 753973 | 752670 |

Calibri 11

Cut
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Paste Special...
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Seq1

e. Copy and paste the formulas down the H3 and I3 columns to the last row of the data.

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FILEID | FILETYPE | ST | CI | SE | LOGRECNO | LOGRECNO | GEOID | Geography Name | B07401_0 | B07401_ | B07401_ | B07401_ | B07401_ | B07401_ | B074 |
| 2 | FILEID | FILETYPE | STUSAB | CHARITER | SEQUENCE | LOGRECNO | LOGRECNO | GEOID | Geography Name | Populatio | Populati | Populati | Populati | Populati | Populati | Popu |
| 3 | ACSSF | 2.01E+06 | ca | 0 | 1 | 1 | 0000001 | 04000US06 | California | 35914126 | 2190758 | 6699737 | 1063624 | 2575775 | 2730510 | 2535 |
| 4 | ACSSF | 2.01E+06 | ca | 0 | 1 | 13 | 0000013 | 05000US06001 | Alameda County, California | 1437687 | 83440 | 238430 | 35525 | 88514 | 114696 | 114 |
| 5 | ACSSF | 2.01E+06 | ca | 0 | 1 | 14 | 0000014 | 05000US06005 | Amador County, California | 38663 | 1109 | 5460 | 1076 | 1893 | 1644 | 1 |
| 6 | ACSSF | 2.01E+06 | ca | 0 | 1 | 15 | 0000015 | 05000US06007 | Butte County, California | 212883 | 9670 | 33507 | 7930 | 28589 | 12007 | 8 |
| 7 | ACSSF | 2.01E+06 | ca | 0 | 1 | 16 | 0000016 | 05000US06009 | Calaveras County, California | 46436 | 1595 | 7170 | 1051 | 2679 | 1979 | 1 |
| 8 | ACSSF | 2.01E+06 | ca | 0 | 1 | 17 | 0000017 | 05000US06011 | Colusa County, California | . | . | . | . | . | . | . |
| 9 | ACSSF | 2.01E+06 | ca | 0 | 1 | 18 | 0000018 | 05000US06013 | Contra Costa County, California | 1011548 | 55839 | 190330 | 29783 | 61276 | 60744 | 59 |
| 10 | ACSSF | 2.01E+06 | ca | 0 | 1 | 19 | 0000019 | 05000US06015 | Del Norte County, California | 28492 | 1431 | 4944 | 959 | 1850 | 1873 | 1 |
| 11 | ACSSF | 2.01E+06 | ca | 0 | 1 | 20 | 0000020 | 05000US06017 | El Dorado County, California | 175652 | 8684 | 30988 | 5148 | 8868 | 8208 | 8 |
| 12 | ACSSF | 2.01E+06 | ca | 0 | 1 | 21 | 0000021 | 05000US06019 | Fresno County, California | 884573 | 65634 | 192065 | 28611 | 70870 | 74046 | 60 |
| 13 | ACSSF | 2.01E+06 | ca | 0 | 1 | 22 | 0000022 | 05000US06021 | Glenn County, California | . | . | . | . | . | . | . |
| 14 | ACSSF | 2.01E+06 | ca | 0 | 1 | 23 | 0000023 | 05000US06023 | Humboldt County, California | 125157 | 6007 | 17968 | 3491 | 14696 | 9189 | 1 |
| 15 | ACSSF | 2.01E+06 | ca | 0 | 1 | 24 | 0000024 | 05000US06025 | Imperial County, California | 159688 | 12281 | 34350 | 6251 | 12608 | 11354 | 10 |
| 16 | ACSSF | 2.01E+06 | ca | 0 | 1 | 25 | 0000025 | 05000US06029 | Kern County, California | 765026 | 57687 | 174744 | 25895 | 56760 | 57171 | 51 |
| 17 | ACSSF | 2.01E+06 | ca | 0 | 1 | 26 | 0000026 | 05000US06031 | Kings County, California | 140796 | 10575 | 27618 | 4456 | 13115 | 12398 | 11 |
| 18 | ACSSF | 2.01E+06 | ca | 0 | 1 | 27 | 0000027 | 05000US06033 | Lake County, California | 63904 | 3218 | 10637 | 1558 | 3164 | 3705 | 2 |
| 19 | ACSSF | 2.01E+06 | ca | 0 | 1 | 28 | 0000028 | 05000US06035 | Lassen County, California | 34510 | 1639 | 5057 | 825 | 2525 | 3032 | 2 |
| 20 | ACSSF | 2.01E+06 | ca | 0 | 1 | 29 | 0000029 | 05000US06037 | Los Angeles County, California | 9706124 | 590555 | 1807440 | 286895 | 685733 | 801602 | 753 |

Seq1

10) Repeat steps 1 through 10 to obtain the margin of errors for the same sequence for California.